

In the Claims.

In Claim 41, delete “ In apparatus for irradiating a selected region of a target material containing an excitable species in order to excite members of said species, including a source of exciting radiation adapted to exciting said members and focusing means to focus said radiation to said selected region, a method of increasing the resolution of said apparatus including the steps of:

providing a second type of radiation able to reduce the excitation of said species by said exciting radiation;

applying said second type of radiation to said selected region to preferentially decrease the excitation in a chosen part of said region; and reducing the net intensity of said second type of radiation on at least one point in said selected region to substantially zero, except radiation of said second type arriving on said point from sources such as scattering and reflection within said apparatus and said material, not feasible to completely eliminate, thereby increasing the resolution of said apparatus.” and substitute therefore –

In apparatus for irradiating a selected region of a target material containing an excitable species in order to produce a state of excitation in members of said species, including a source of exciting radiation adapted to producing a state of excitation in said members and focusing means to focus said radiation to said selected region, a method of increasing the resolution of said apparatus including the steps of:

providing a second type of radiation able to reduce the said state of excitation of said species by said exciting radiation; and

applying said second type of radiation-preferentially to a chosen part of said selected region such that the net intensity of said second type of radiation on at least one point in said selected

region is substantially zero, except radiation of said second type arriving on said point from sources such as scattering and reflection within said apparatus and said material, not feasible to completely eliminate, thereby increasing the resolution of said apparatus. —

In Claim 42, delete “The method in Claim 41, wherein the step of reducing the net intensity of said second type of radiation on at least one point in said selected region to substantially zero includes the additional steps of providing a first source of said second type of radiation directed on said point, and a second source of said second type of radiation directed on said point, coherent with said first source, and adapted to destructively interfere, at said point, with the radiation from said first source of said second time of radiation.” and substitute therefor --

The method in Claim 41, wherein the step of applying said second type of radiation preferentially to a chosen part of said selected region such that the net intensity of said second type of radiation on at least one point in said selected region is substantially zero includes the additional steps of providing a first source of said second type of radiation directed on said point, and providing a second source of said second type of radiation directed on said point, coherent with said first source, and adapted to destructively interfere, at said point, with the radiation from said first source of said second type of radiation. —

In Claim 51, delete “The method of Claim 41 wherein said radiationally excitable species are in a class including:

- fluorescent molecules in a target material to be examined;
- molecules in a target material consisting of a recording medium encoding information;
- molecules in a target material adapted to undergo a long term change in at least one property following exposure to said exciting radiation; and
- molecules in a photolithographic resist.” and substitute therefor --

The method of Claim 41 wherein said excitable species are in a class including:
fluorescent molecules in a target material to be examined;
molecules in a target material to be examined that can emit radiation following excitation;
particles in a target material to be examined that can emit radiation following excitation;
molecules in a target material consisting of a recording medium encoding information;
molecules in a target material adapted to undergo a long term change in at least one
property following exposure to said exciting radiation; and
molecules in a photolithographic resist. --

In Claim 58, delete “ The method of Claim 41 wherein a plurality of points are imagined
simultaneously. “ and substitute therefor --

The method of Claim 41 wherein a plurality of points are imaged simultaneously. --